

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S30	25	(US-20020189228-\$ or US-20050202240-\$). did. or (US-3763640-\$ or US-6905764-\$ or US-6425237-\$ or US-5856005-\$ or US- 4411129-\$ or US-4307565-\$ or US-6258420- \$ or US-3952496-\$ or US-6244031-\$ or US- 6705353-\$ or US-7395654-\$ or US-6074751- \$ or US-4296597-\$ or US-4164839-\$ or US- 6335093-\$ or US-5802836-\$ or US-5379501- \$ or US-4610131-\$ or US-4467594-\$).did. or (US-3458988-\$ or US-3438186-\$ or US- 3082591-\$ or US-3041812-\$).did.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:24
S32	22	S30 and twist\$4	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:25
S31	0	S30 and (overtwist\$3 or over-twist\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:25
S34	53	(loop\$3 with twist\$3 with yarn).ab.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:26
S33	1276	(loop\$3 with twist\$3 with yarn)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:26
S35	63	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) with (twist\$4)) same yarn	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:33
S37	38	(core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4 or (cover\$5 near3 yarn) or (sheath near3 core)) and (under near4 twist \$4) and (over near4 twist\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:45
S36	0	(core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) and (under near4 twist\$4) and (over near4 twist\$4)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/29 15:45
S39	4	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) with (twist\$4)) and (sewing near3 (yarn or thread))	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 16:51
S38	0	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) with (twist\$4)) same (sewing near3 (yarn or thread))	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 16:51
S40	12	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) same (twist\$4)) and (sewing near3 (yarn or thread))	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 16:53
S43	1	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) and (twist\$4)) and (sewing near4 (yarn or thread))	EPO; JPO; DERWENT	OR	ON	2009/06/30 16:54
S42	0	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) same (twist\$4)) and (sewing near4 (yarn or thread))	EPO; JPO; DERWENT	OR	ON	2009/06/30 16:54
S41	12	((core-spun\$4 or core-spin\$4 or corespun\$4 or corespun\$4) same (twist\$4)) and (sewing near4 (yarn or thread))	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 16:54
S44	805	(57/210,211).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/06/30 16:59

S46	86	S44 and loop\$3 and twist\$4	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 17:00
S45	98	S44 and loop\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 17:00
S47	25	"569890" "919649"	EPO; JPO; DERWENT	OR	ON	2009/06/30 17:18
S48	598	(twist\$4) and (sewing near4 (yarn or thread))	EPO; JPO; DERWENT	OR	ON	2009/06/30 17:27
S49	89	(twist\$4) and (sewing near4 (yarn or thread)) and loop\$3	EPO; JPO; DERWENT	OR	ON	2009/06/30 17:28
S51	27	((TOSHIHIKO) near2 (KIMURA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 17:32
S50	1	((HARUKI) near2 (KITAMURA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 17:32
S52	367	("0060013"   "1994926"   "20030037530"   "20030089098"   "2304281"   "2851715"   "2864230"   "2908133"   "2997838"   "3041812"   "3070950"   "3078654"   "3083522"   "3091510"   "3110151"   "3132462"   "3137991"   "3153315"   "3199281"   "3200576"   "3225533"   "3287892"   "3296785"   "3303640"   "3309863"   "3357171"   "3365872"   "3401516"   "3410076"   "3410077"   "3410080"   "3411287"   "3433008"   "3438193"   "3438194"   "3447296"   "3447302"   "3453170"   "3457715"   "3474613"   "3477220"   "3484329"   "3496714"   "3517498"   "3540204"   "3568424"   "3577873"   "3608296"   "3609835"   "3640064"   "3685268"   "3691750"   "3729918"   "3732679"   "3749055"   "3763640"   "3771307"   "3775960"   "3780515"   "3807162"   "3812665"   "3832841"   "3844103"   "3911548"   "3918244"   "3921382"   "3938314"   "3940917"   "3945189"   "3948033"   "3955952"   "3968638"   "3971202"   "3973386"   "3988883"   "3991548"   "3999361"   "4000551"   "4010601"   "4047373"   "4051660"   "4058968"   "4070817"   "4080777"   "4081887"   "4107909"   "4144700"   "4145869"   "4145870"   "4148178"   "4152885"   "4155214"   "4159619"   "4164117"   "4164836"   "4164839"   "4169349"   "4170865"   "4180968"   "4196574"   "4212152"   "4218869"   "4219997"   "4222223"   "4226079"   "4244173"   "4246747"   "4248036"   "4265082"   "4280261"   "4287714"   "4296597"   "4302925"   "4304092"   "4307566"   "4311000"   "4319447"   "4321789"   "4330988"   "4341063"   "4345424"   "4351148"   "4359856"   "4365466").PN. OR ("4411129"   "4437301"   "4454196"   "4467594"   "4475330"   "4495760"   "4505100"   "4523428"   "4567720"   "4574578"   "4575472"   "4610131"   "4648240"   "4661404"	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/30 17:36

		"4674273"   "4712366"   "4736578"   "4773206"   "4789571"   "4870813"   "4934134"   "4955189"   "4957784"   "4965919"   "5083419"   "5183442"   "5201699"   "5307616"   "5364701"   "5379501"   "5429868"   "5459991"   "5497608"   "5589238"   "5749212"   "5802836"   "6038847"   "6074751"   "6287688"   "6316101"   "6423407"   "6503623").PN. OR ("2002/0189228"   "2005/0055997"   "2005/0202240"   "2007/0214765"   "2009/0071117"   "3041812"   "3082591"   "3315328"   "3435605"   "3438186"   "3458988"   "3487628"   "3763640"   "3952496"   "4164839"   "4287714"   "4296597"   "4307565"   "4411129"   "4467594"   "4610131"   "5379501"   "5560192"   "5802836"   "5856005"   "6074751"   "6244031"   "6258420"   "6335093"   "6425237"   "6705353"   "6905764"   "7124569"   "7395654").URPN.				
L1	566	(57/210).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/10/20 10:54
L4	11	1 and 3	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 10:55
L3	681	(57/239,245,246).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/10/20 10:55
L2	511	(57/236,238).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/10/20 10:55
L5	22	1 and 2	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:00
L6	1	(sheath near3 core) same loop\$4 same ((upper?twist\$4 same under?twist\$4) or (s? twist\$4 same z?twist\$4))	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:04
L7	22	(sheath near3 core) and loop\$4 and ((upper?twist\$4 same under?twist\$4) or (s? twist\$4 same z?twist\$4))	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:05
L8	1	("3763640").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/10/20 11:28
L9	2	(sheath near3 core) and loop\$4 and ((upper?twist\$4 and under?twist\$4) or (s? twist\$4 and z?twist\$4))	EPO; JPO; DERWENT	OR	ON	2009/10/20 11:32
L14	1	((NAOKI) near2 (YAMAGA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:37
L13	10	((YOSHIKAZU) near2 (TSUJI)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:37
L12	29	((KAZUO) near2 (UMEDA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:37
L11	27	((TOSHIHIKO) near2 (KIMURA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:37
L10	1	((HARUKI) near2 (KITAMURA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:37
L15	4	((AKIHIRO) near2 (MAEKAWA)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:38
L17	2962	10 11 12 13 14 15 toray.asn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:39

L18	3	(sheath near3 core) and loop\$4 and ((upper?twist\$4 and under?twist\$4) or (s?twist\$4 and z?twist\$4)) and 17	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 11:40
L21	4	(sheath near3 core) and loop\$4 and ((upper?twist\$4 same under?twist\$4) or (s?twist\$4 same z?twist\$4)) and 20	US-PGPUB; USPAT; USOCR	OR	ON	2009/10/20 12:10
L20	2195	((57/210,236,238,239,245,246) or (428/370)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/10/20 12:10
L19	2195	((57/210,236,238,239,245,246) or (428/370)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/10/20 12:10

**EAST Search History (1 interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L22	137	((57/210,236,238,239,245,246) or (428/370)).CCLS.	US-PGPUB; UPAD	OR	OFF	2009/10/20 12:11
L24	1	(sheath near3 core).clm. and loop\$4 and ((upper?twist\$4 and under?twist\$4) or (s?twist\$4 and z?twist\$4)).clm.	US-PGPUB; UPAD	OR	ON	2009/10/20 12:12
L23	5	(sheath near3 core) and loop\$4 and ((upper?twist\$4 and under?twist\$4) or (s?twist\$4 and z?twist\$4))	US-PGPUB; UPAD	OR	ON	2009/10/20 12:12
L25	1	(sheath near3 core).clm. and loop\$4.clm. and ((upper?twist\$4 and under?twist\$4) or (s?twist\$4 and z?twist\$4)).clm.	US-PGPUB; UPAD	OR	ON	2009/10/20 12:13

**10/20/2009 12:14:02 PM****C:\Documents and Settings\jchris1\My Documents\ EAST\ Workspaces\ 10510336.wsp**